



Status Update PFNA Investigation Solvay Specialty Polymers USA, LLC West Deptford, NJ, Plant

May 7, 2014

SPECIALTY POLYMERS

# **Meeting Goals**

# Iterative process – will continue to evolve as data are collected

- 1. Summarize key findings to date
- 2. Provide status updates of groundwater investigation
- 3. Discuss plan for private well sampling
- 4. Discuss next steps and schedule



### **Investigation Scope**

- Air modeling of historic PFC emissions
- Groundwater sampling for PFCs
  - Onsite/offsite monitoring wells
  - Public water system (PWS) wells
- Data evaluation to identify:
  - Primary transport pathway(s) to groundwater
  - PFC distribution from/near West Deptford Plant

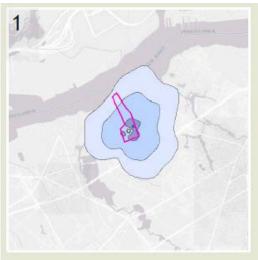


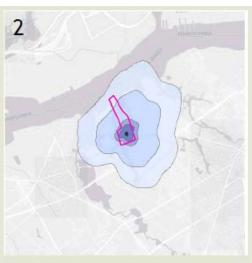
# **Key Findings - Air**

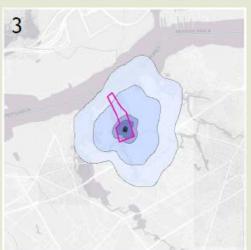
- Potential contribution of historic air emissions was relatively minor
  - Maximum deposition occurred within the facility boundary
  - May contribute to PFCs in onsite groundwater
  - Not likely to contribute to PFCs in PWS wells
  - Air deposition pathway is still under evaluation

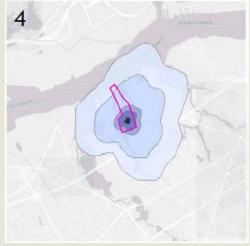


# **Air Model Results are Similar for Each Stack Scenario**









Scenario	Percent of Unit Emission Rate:		
	Pt3001	Pt3002	Pt3004
1	100%	0%	0%
2	67%	16%	16%
3	50%	25%	25%
4	33%	33%	33%

Solvay Property Boundary

Total Deposition Flux for a Unit Emission Rate (g/m² per 1 g/s):

0.005 - 0.01

0.01 - 0.05

0.05 - 0.1

0.1 - 0.5

0.5 - 1

> 1

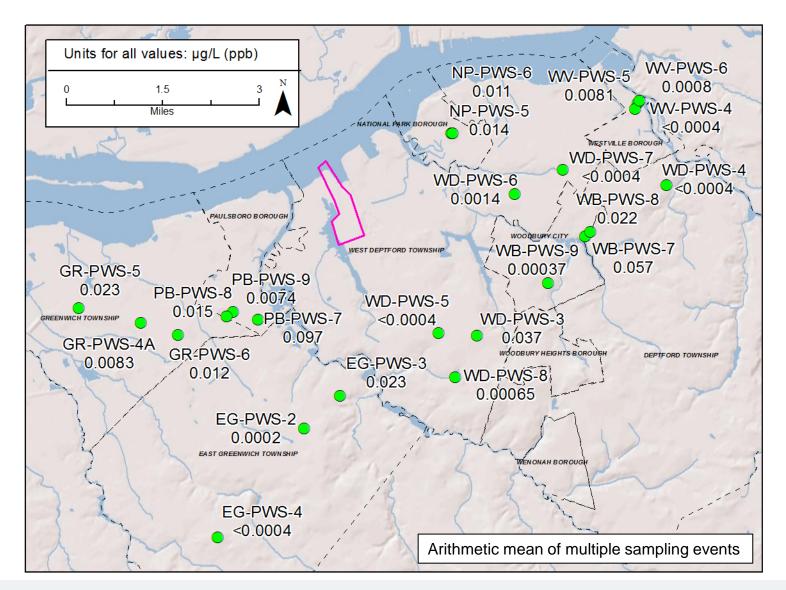


# **Key Findings – Groundwater Sampling**

- PFCs detected in onsite/offsite monitoring wells and some PWS wells
- PWS data indicate:
  - Wells with elevated PFCs are completed in aquifer units that recharge from the Delaware River
  - PFCs decrease with distance inland from river
  - No apparent link between PWS wells and site groundwater
- Monitoring well data indicate:
  - Offsite transport in a preferential direction toward industrial park

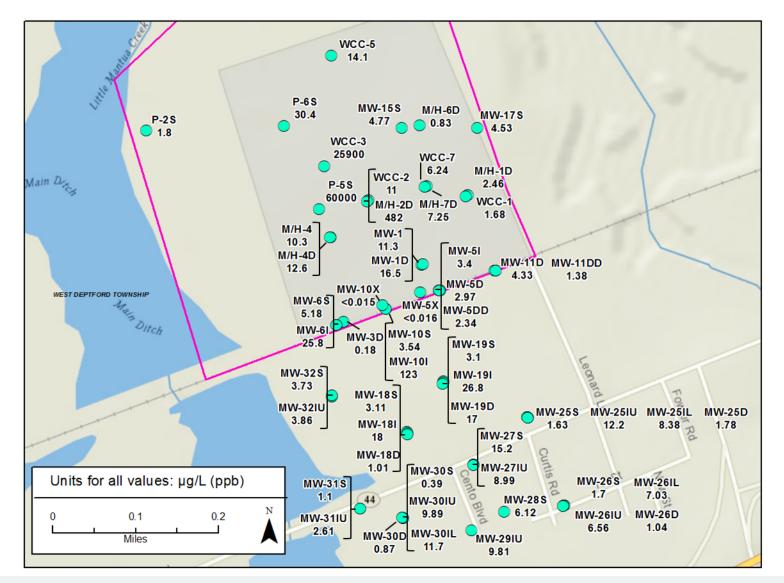


#### **PWS Wells - PFNA**



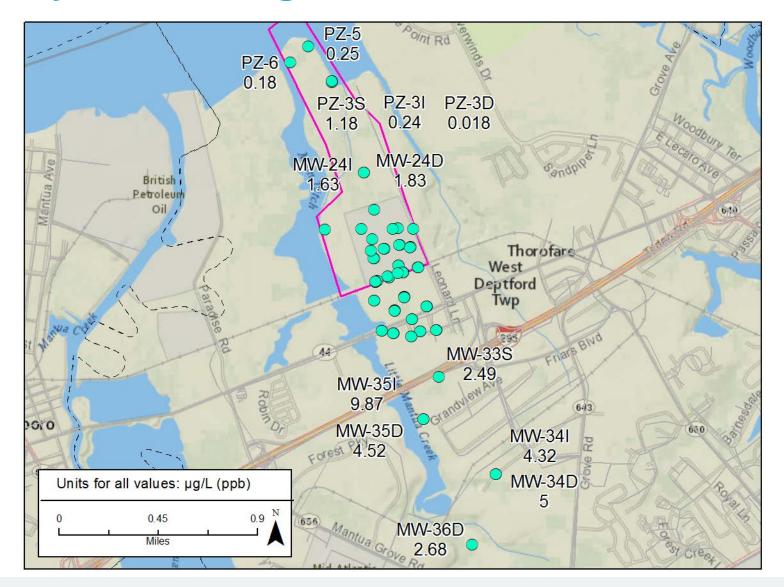


# Solvay Monitoring Wells – PFNA (Closeup View)



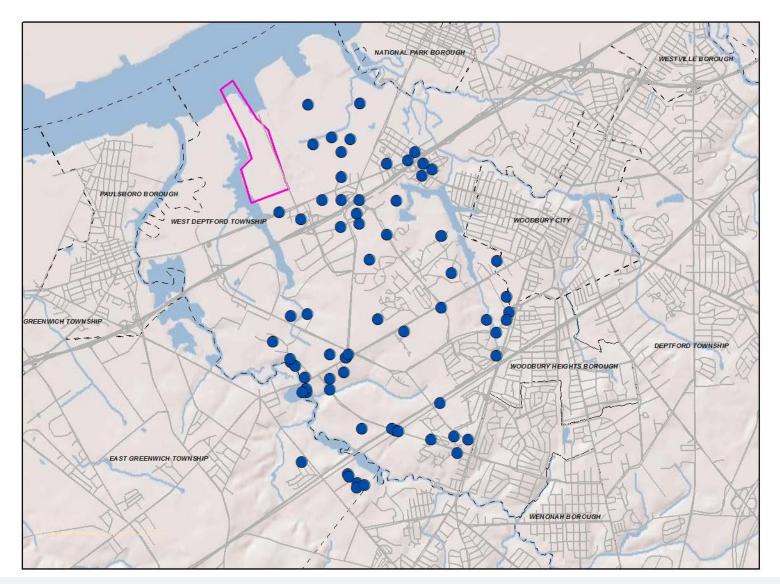


# **Solvay Monitoring Wells – PFNA**





#### **Initial Private Potable Wells Sampling Area**





# **Private Potable Well Sampling**

#### Survey

- Well lists received from NJDEP and West Deptford township
  - Potable wells along the groundwater flow path downgradient of the Site
  - Includes other wells near but potentially outside of flow path
- Immediate Next Steps:
  - Communications: Municipal officials, NJDEP introductory letter similar to letter provided to PWS?
  - Gain access and canvass properties to field verify private potable wells
  - Expedite NJDEP notification ?
  - Sample identified and verified wells

